

SYSTEM AND METHOD FOR DYNAMIC DATA CLUSTERING

Abstract

A system and method for dynamically identifying clusters of related data in a database uses a probe to identify the clusters. These clusters, also known as density patterns, are identified by launching the probe from an initial position in a data space associated with the data comprised of a plurality of data points. Each of the data points attracts the probe to itself. Distant data points attract the probe to a lesser extent than do proximate data points. In this manner, the probe is drawn along a trajectory toward an equilibrium point. Once the equilibrium point is reached, a cluster is identified and its location optionally stored. Additional probes are launched from different initial positions in the data space to identify other clusters that may exist in the data space until no unique clusters are identified. The collection of identified clusters is representative of a number and, in some embodiments of the present invention, a general location of related data within the data space.

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